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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/506,428

03/09/2005

Yoshinori Suzuki

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EXAMINER

ROBERTS, JESSICA M

ART UNIT

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2621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/506,428	Applicant(s) SUZUKI, YOSHINORI	
	Examiner JESSICA ROBERTS	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/02/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snook et al., WO/2001/33864.
4. **Regarding claim 23**, Snook teaches A moving picture decoding method which generates a predicted image using information on motion vectors and information on reference images, the moving picture decoding method having multiple prediction modes including a mode without motion vector decoding, comprising: a step of selecting a frame(s) to be referenced to in the prediction of each prediction direction in the prediction mode from among multiple candidate reference frames (Snook teaches a strategy for the choice of the prediction mode to be used in the encoding of a block Y of the picture P1. Further taught is an additional step allowing to decide which prediction

mode to choose from the encoding of the block Y among forward, backward and bidirectional ones, pg. 5 col. 26-30. Further taught is motion estimation consists of the derivation of the minimum of the function SAD between the block Y and candidates macroblocks belonging to the frame P2 using Equation (1), pg. 5 line 31-33. Since Snook discloses performing motion estimation between candidate macroblocks, it is clear to the examiner that Snook selects the frames from the candidate blocks, which reads upon the claimed limitation); and a step of selecting motion vector information used in the prediction mode (Snook discloses where SAD_{fwd}, SAD_{bck}, and SAD_{bidir} represent the respective errors resulting from a forward, backward, and a bidirectional prediction of the block Y. In this preferred embodiment of the invention, the block Y is encoded according to the prediction mode giving the smallest error (pg. 6 line 8-11), wherein said step of selecting motion vector information is performed based on whether blocks adjacent to a current block have a motion vector (Snook discloses a backward motion estimation of the block Y on the basis of the future reference frame P2 is performed in a step 7. This motion estimation consists of the derivation of the minimum of the function SAD between the block Y and candidates macroblocks belonging to the frame P2 using Equation (1). Since Snook discloses performing motion estimation that consists of a SAD function between macroblocks, it is clear to the examiner that in order to compute the motion vector, the block would be neighboring or adjacent to one another, which reads upon the claimed limitation);

5. Snook is silent in regards to moving picture decoding is performed by generating said predicted image using the information on said selected reference frame and the

information on said selected motion vectors in said prediction mode. However, Snook discloses a method of encoding that includes reference to a past reference picture P0 and to a future reference picture P2 ,(fig2). Further, the method is a strategy for the choice of the prediction mode to be used in the encoding of a block Y of the picture P1, pg. 3 line 25-32. Snook discloses where SADfwd, SADbck, and SADbidir represent the respective errors resulting from a forward, backward, and a bidirectional prediction of the block Y. In this preferred embodiment of the invention, the block Y is encoded according to the prediction mode giving the smallest error (pg. 6 line 8-11), therefore it is well known in the art that a decoding process has to correspond to the encoding process. Further, the inverse of the encoded video data yields a decoded image, which reads upon the claimed limitation).

6. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to perform moving picture decoding as it is well known in the art that a decoding process has to correspond to the encoding process.

Examiners Note

The referenced citations made in the rejection(s) above are intended to exemplify areas in the prior art document(s) in which the examiner believed are the most relevant to the claimed subject matter. However, it is incumbent upon the applicant to analyze the prior art document(s) in its/their entirety since other areas of the document(s) may be relied upon at a later time to substantiate examiner's rationale of record. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & associates, Inc. v. Garlock,

Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

However, “the prior art’s mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed....” In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

8. Suzuki et al., US-7, 020,196 B2 Content Supplying Apparatus and Method, and Recording Medium

9. Odaka et al., US-5,467,136 Video Decoder for Determining A Motion Vector From A Scaled Vector and A Difference Vector

10. Suzuki et al., US-6, 535,558 Picture Signal Encoding Method and Apparatus, Picture Signal Decoding Method and Apparatus and Recording Medium

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA ROBERTS whose telephone number is (571)270-1821. The examiner can normally be reached on 7:30-5:00 EST Monday-Friday, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621

/Jessica Roberts/
Examiner, Art Unit 2621
18, March 2008